Supplying Training and Educational Materials to the Forensic DNA Community

NIST has developed useful and accessible training materials to benefit the application of technology utilized in the forensic DNA field. Training workshops are being conducted and education materials released to aid understanding of fundamental principles involved in human identity testing.

J. M. Butler, M. D. Coble, P. M. Vallone (Div. 831)

In 2006, ten different training workshops were conducted as part of forensic conferences or as specific training to individual forensic DNA laboratories around the country. Hundreds of PowerPoint slides were also made available on the NIST STRBase website so that these valuable educational materials may be used by others.

In late February 2006 at the American Academy of Forensic Sciences (AAFS) meeting in Seattle, Washington, Dr. Butler and Dr. Bruce McCord, a colleague from Florida International University, conducted an all day workshop on advanced topics in forensic DNA analysis and provided instruction to 200 people representing federal, state, and local crime laboratories from 30 different states, industry leaders, college professors, expert witnesses, and defense lawyers. The training materials presented are available on the NIST STRBase website: http://www.cstl.nist.gov/biotech/strbase/training.htm. Dr. Butler's book, Forensic DNA Typing: Technology, and Genetics of STR Markers, is now in its second edition and used worldwide by forensic scientists, lawyers, and college students studying this dynamic field.

Members of the NIST Human Identity Project Team are helping to train the scientific and legal communities involved in forensic DNA technology.

Also at the 2006 AAFS meeting, the Department of Justice released a new CD-ROM entitled "Principles of Forensic DNA for Officers of the Court" funded under the President's DNA Initiative. Dr. Butler developed some of the content of this training tool, which is also available online at http://www.dna.gov.



In addition, Dr. Butler serves on the advisory group for the DNA Forensics Program of the American Prosecutors Research Institute (APRI) and is working to develop a standard curriculum for training prosecutors nationwide. In the advisory group's first meeting held at the end of January 2006, several crime scenarios with hypothetical biological evidence were designed. In the coming months, NIST will be generating data for these cases, which will be used in future training courses taught by APRI.



In 2006, Dr. Coble and Dr. Vallone helped teach workshops on mitochondrial DNA and quantitative PCR techniques used for DNA quantitation. Slides from these workshops are available at http://www.cstl.nist.gov/biotech/strbase/YmtDNAworkshop.htm and http://www.cstl.nist.gov/biotech/strbase/qPCRworkshop.htm. Dr. Butler provided specific laboratory training to the New York City Office of Chief Medical Examiner Forensic Biology Section (New York City, NY), the Minnesota Bureau of Criminal Apprehension DNA Section (St. Paul, MN), and the New Jersey State Police DNA Laboratory (Hamilton, NJ).

Through funding from the National Institute of Justice to the NIST Office of Law Enforcement Standards, the NIST Human Identity Project Team develop new technologies, conduct interlaboratory studies to define measurement needs, and produce standard reference materials to aid calibration of forensic DNA laboratories.

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